

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Eric Anderson Examiner: Mark A. Radtke
Serial No.: 10/699,486 Group Art Unit: 2165
Filed: October 31, 2003 Docket No.: 200207252-1
Title: Textual Filesystem Interface Method and Apparatus

REPLY APPEAL BRIEF UNDER 37 C.F.R. § 41.41

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Examiner's Answer mailed June 13, 2008, Appellants file this Reply Brief in accordance with 37 C.F.R. § 41.41.

AUTHORIZATION TO DEBIT ACCOUNT

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's deposit account no. 08-2025.

First, on page 13 of the Examiner Answer, the examiner argues as follows:

It is noted that Verma is not relied on for teaching the duplication step. Deshayes is relied on for this teaching (see Office Action, 30 October 2007, page 4). Therefore, Appellant's arguments with respect to this limitation are moot.

Appellant's arguments with regard to this limitation are not moot. In fact, on page 17 of Appellant's Appeal Brief, this limitation and the teachings in Deshayes are fully addressed. Since the examiner has ignored these arguments (i.e., considering the arguments as being moot), Appellants will briefly reiterate the arguments.

Specifically, Deshayes teaches methods and systems for backing up and restoring data in a computer system. Data is copied from a primary storage device to a backup storage device. This data, however, is not a file system. In other words, nowhere does Deshayes teach or even suggest duplicating a filesystem into a pseudo-file system. Duplicating data and duplication a filesystem are two very different concepts.

Appellants believe that some confusion may exist as to the meaning of a filesystem (i.e., what is filesystem). An understanding of filesystems will assist the BPAI in recognizing that the differences between the claims and the teachings in Deshayes are great and not a predictable variation to one of ordinary skill in the art. Appellants discuss filesystems in the context of the specification so the claims can be properly read and interpreted in light of the specification.

As explained in Appellant's patent application:

Operating systems use filesystems to organize data in logical units that applications and users can easily use and manipulate. The files in the filesystem are typically stored in a hierarchical tree structure identified with a name and may include properties identifying the size of the file in bytes and the data format or the application used to process the files. Conventional filesystems used to organize and make files available work

fine when only a single process reads or writes the files. (See lines 1-6 of paragraph [0002] on page 2).

A filesystem with transactional capabilities allows users to both share and update files in a robust manner. Users across a large enterprise can use the filesystem to manage changes to documents and files without expensive and complex additional document management software. (See lines 2-5 of paragraph [0011] on pages 4-5).

With a proper understanding of a filesystem, it is clear that Deshayes teaches methods and systems for backing up and restoring data, not duplicating filesystems. Deshayes does not teach or suggest duplicating a filesystem into a pseudo-file system or using text based commands to operate on the pseudo-file system. Deshayes teaches backing up data in case of a storage failure; duplicating a filesystem is not taught.

Second, on page 13 of the Examiner Answer, the examiner argues that Verma teaches operating on a pseudo-file system since “Verma is directed to a transactional file system that exists on top of a normal file system.” This argument is flawed because the transactional file system in Verma is not a duplicate of another file system. Claim 1 recites that the filesystem is duplicated with the pseudo-filesystem. Nowhere does Verma teach that the transactional file system that exists on top of a normal file system is a duplicate of the normal file system. Appellants respectfully ask the BPAI to consider each word in the claims.

Third, on page 14 of the Examiner Answer, the examiner argues as follows:

Berliner is not relied on for teaching the duplication step. Verma is relied on for this teaching (see Final Rejection, page 4). Therefore, Appellant’s arguments with respect to this limitation are moot.

The examiner’s argument here is contradictory to the previous statement on page 13 of the Examiner Answer: “It is noted that Verma is not relied on for teaching the

duplication step. Deshayes is relied on for this teaching (see Office Action, 30 October 2007, page 4)."

Regardless of this contradiction, Appellant's appeal brief fully explains why Verma in view of Berliner and Deshayes does not teach or suggest duplicating a filesystem into a pseudo-file system. Since this explanation is articulated in the Appellant's appeal brief, the explanation is not reproduced again here.

Fourth, on page 14 of the Examiner Answer, the examiner argues as follows:

Berliner is relied on for teaching the step of receiving text-based commands to operate on a pseudo-file system. The pseudo-file system of Berliner is CVS. CVS is a well-known program that tracks versions of files.

Appellants respectfully disagree with this argument. Berliner teaches a program (named "cvs") that enables multiple software developers to modify different modules of code for a software program without having such modifications cause conflicts. In other words, cvs enables "concurrent editing of source files among multiple software developers" (see section 2, paragraph 1, lines 5-6). **CVS is not a duplicated filesystem.**

Appellants acknowledge that claims must be given their broadest interpretation during patent examination. However, this interpretation must be a "**reasonable interpretation consistent with the specification**" (see MPEP 2111; emphasis added). Appellant's specification repeatedly uses the term "filesystem" in a manner consistent with the plain meaning of this term. It is not reasonable to interpret the computer program cvs in Berliner as being a duplicated filesystem (i.e., a pseudo-filesystem).

Fifth, on page 16 of the Examiner Answer, the examiner argues as follows:

Deshayes is relied on for teaching the duplication step. The operating step is taught in Verma as described above. Appellant's arguments with respect to the operating step and Deshayes are moot.

Appellant's arguments with regard to this limitation are not moot. As explained in Appellant's appeal brief, Deshayes teaches methods and systems for backing up and restoring data in a computer system. Nowhere does Deshayes teach or even suggest duplicating a filesystem into a pseudo-file system.

Furthermore, on page 16 of the Examiner Answer, the examiner argues the following: "Deshayes is directed towards backing up and restoring virtual partitions. Virtual partitions are pseudo-file systems because they are virtual (i.e., "pseudo") versions of file system elements." Appellants strongly disagree with this argument and logical analysis.

Basically, the examiner is arguing that virtual partitions of data are pseudo-file systems because the virtual partitions are pseudo versions of a file system. This statement is not true. Appellants respectfully assert that the examiner is not providing the plain meaning to terms such as "virtual partition" and "file system." Further yet, the examiner is grossly misconstruing the teachings in Deshayes.

Appellants respectfully ask the BPAI to read Deshayes at column 2, lines 8-54. Here, Deshayes accurately describes how the storage of data in a file system is mapped. The view of the operating system of this mapping does not correspond to the actual, physical storage system (hence the term "virtual"). The virtual storage volumes are divided into partitions or segments of storage. These partitions are "virtual" because they are actually stored across various physical storage volumes.

One skilled in the art appreciates that virtual partitions in a data storage system and filesystems are completely different. Therefore, it is improper and illogical to argue: virtual partitions of data are pseudo-file systems because the virtual partitions are pseudo versions of a file system.

Appellants respectfully request reversal of the pending rejections.

Respectfully submitted,

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